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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,149

09/29/2005

Ranjit Malik

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26587 7590 01/22/2009  
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EXAMINER

MCCLENDON, SANZA L

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/522,149	<b>Applicant(s)</b> MALIK ET AL.	
	<b>Examiner</b> Sanza L. McClendon	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-21 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-21 and 23-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the Amendment received on 10/31/2008, the examiner has carefully considered the amendments. The examiner acknowledges the addition of new claims 29-30.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-10, 12-21 and 23-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102/35 USC § 103***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5, 8, 18, 23-24, 26, and 28-30 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hu et al (6,649,259).

6. Hu et al sets forth adhesive compositions for shrinkable films and/or labels. Said adhesive comprises a base resin, such as epoxidized block copolymers and/or cycloaliphatic epoxies, such as Cyacure UVI6100; a photoinitiator, such as a cationic onium salt; a tackifier resin; a diluent; a wax; a compatible polymer, an alcohol containing co-reactant and other additives--see a) – h) in columns 2-4. Per examples 5-8, Hu et al sets forth compositions comprising 30 to 25 % of an epoxidized copolymer under the tradename Kraton L-207 from Shell Chemical Company; from 0.2 to 1.5% of a cationic latent photoinitiator; from 50 to 60 of a hydrogenated DCPD resin having a softening point of 100 0C under the tradename ESCOREZ 5400; and from 0.01% of a antioxidant. These examples are deemed to read on the adhesive of claims 1 and 29, wherein it is deemed that the L-207 reads on applicant's polymerizable compound having a softening point of less than 30 0C and the ESCOREZ 5400 reads on applicant's polymer having a softening point greater than 60 0C. Regarding applicant's "transformable pressure sensitive adhesive", it is deemed that the solid hydrogenated tackifier resin in the composition of the examples is in an amount sufficient enough to allow for forming a bond of measurable strength when contacted with another surface as explained by Hu et al in column 2, lines 40-50 before the irradiation step which will make the bond permanent upon exposure. Regarding claim 30; Hu et al teaches that the addition of compatible polymers such as polyisobutylene can be added to the composition—see column 4, lines 39-40. Other additive such as those found in column 4 under section h) read on claims 8 and 28.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu et al (as cited above) as applied to claims 1-3, 5, 8, 18, 23-24, 26, and 28-30 above, and further in view of Masse et al (5,516,824) and Kitamura et al (2005/024981).

9. Regarding 12-17, Hu et al does not expressly teach using said adhesive in the applications as set forth in claims 12-17; however Hu et al teaches adhesive compositions that are useful in bonding substrates to one another. It is known in the optical/electronic art, such as sealants for LCD devices and in lamination processes to use UV curable adhesives comprising polymerizable epoxy resins and tackifying resin such as taught in Kitamura et al and Masse et al. Therefore the examiner deems that one of ordinary skill in the art using Hu et al would have recognized the many different bonding applications of the adhesive, sealing optical/electronic devices or laminating optical and /or medical articles together, such as taught by Kitamura et al and Masse et al in the absence of evidence to the contrary and/or unexpected results.

10. Claims 6-7, 9-10, 19-21, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu et al as applied to claims 1-3, 5, 8, 12-18, 23-24, 26, and 28-30 above, and further in view of Kitamura et al (2005/024981) and Sullivan et al (2004/0225025).

11. The combination of Hu et al and Kitamura et al teach that it is obvious to use the adhesive as taught by Hu et al in applications as taught by Kitamura et al, i.e.,

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sealing and bonding LCD components--see above 103(a) rejection. The combination of Hu et al and Kitamura et al fails to teach the addition of nanoclays, desiccant materials, or crosslinking agents. However, it is known in the art of adhering and/or sealing optical devices, such as LCD components to add nanoclays and silica in amounts from .01 to 10% by weight, as found in Sullivan et al, wherein silica is a known desiccant material. The addition of these components improves barrier properties by reducing the water vapor transmission and/or permeance of the cured adhesive composition. Therefore it would have been obvious to add these components to the composition of Hu et al when used for sealing LCD components as taught by Kitamura et al. The motivation would have been a reasonable expectation of improving the barrier properties of the adhesive composition as suggested by Sullivan et al in the absence of evidence to the contrary and/or unexpected results.

12. The combination of Hu et al, Kitamura et al, and Sullivan et al do not teach the addition of crosslinking agents. However the examiner deems that the compounds of claims 10 and 21 are known crosslinking agents for epoxy compounds and that it is well within the skill level of an ordinarily skilled artisan to add known compounds for there known affects, such as tailoring the final properties of the cured composition (hardness, abrasion resistance, heat resistances, etc) and/or to increase the cure speed (i.e., more reactive sites the faster the cure). Thus claims 9-10 and 21-20 are deemed obvious in the absence of evidence to the contrary and/or unexpected results.

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L McClendon/  
Primary Examiner, Art Unit 1796

SMc